Claims

1. A method for evaluating contents of a message, comprising:

characterizing a message segment;

scanning the message segment to define tokens associated with the message segment;

parsing the tokens to extract substructures;

determining rules associated with the tokens, the rules when executed defining actions;

executing the actions associated with the message segment; and

queuing the message segment for transmission to a destination.

2. The method of claim 1, further including:

associating the message segment with a meta session through the tokens; and

retrieving meta session state information related to the message.

3. The method of claim 1, wherein the message segment is received from a sender, the sender using a network to send a message associated with the message segment, and the message associated with the message segment is identified as a suspect message which is quarantined.

4. The method of claim 1, wherein the method operation of parsing the tokens to extract substructures includes,

creating a parse tree.

5. The method of claim 1, wherein the method operation of determining rules associated with the tokens includes,

defining an object oriented scheme to associate the message segment with at least one of the rules.

6. The method of claim 5, wherein the method operation of defining an object oriented scheme to associate the message segment with at least one of the rules is enabled through grammar based access.

7. The method of claim 1, wherein the method operation of parsing the tokens to extract substructures includes,

searching a list of keywords; and

inferring semantics of sub-strings between the key words.

8. The method of claim 1, wherein the message is composed of multiple segments.

9. The method of claim 8, wherein the substructures span multiple message segments

10. A computer readable media having program instructions for evaluating the contents of a message, comprising

program instructions for characterizing a message segment;

program instructions for scanning the message segment to define tokens associated with the message segment;

program instructions for parsing the tokens to extract substructures;

program instructions for determining rules associated with the tokens, the rules defining actions;

program instructions for executing the actions associated with the message segment; and

program instructions for queuing the message segments for transmission.

11. The computer readable media of claim 10, further including:

program instructions for associating the message segment with a meta session through the tokens; and

program instructions for retrieving meta session state information related to the message.

12. The computer readable media of claim 10, wherein the program instruction for characterizing a message segment,

program instructions for determining a grammar type of the message.

13. The computer readable media of claim 10, wherein the program instructions for parsing the tokens to extract substructures includes,

program instructions for creating a parse tree.

14. The computer readable media of claim 10, wherein the message is configured to be sent in multiple segments through a packet based network.

15. The computer readable media of claim 10, wherein the program instructions for parsing the tokens to extract substructures includes,

program instructions for searching a list of keywords; and

program instructions for inferring semantics of sub-strings between the key words.

16. A network device configured to provide content based security, comprising:

circuitry for scanning a message to define tokens associated with the message;

circuitry for extracting substructures from the tokens;

circuitry for identifying rules associated with the tokens; and

circuitry for executing the identified rules.

17. The network device of claim 16, wherein the circuitry for extracting substructures from the tokens includes,

circuitry for associating the message with a meta session.

18. The network device of claim 16, wherein the circuitry for extracting substructures from the tokens includes,

circuitry for retrieving meta session state information related to the message.

19. The network device of claim 16, wherein the circuitry for scanning a message to define tokens associated with the message includes,

circuitry for searching a list of keywords; and

circuitry for inferring semantics of sub-strings between the key words.

20. The network device of claim 16, further comprising:

circuitry for determining a grammar type of the message.

21. The network device of claim 16, wherein the circuitry for scanning a message to define tokens associated with the message includes,

circuitry for building a data structure from the defined tokens.